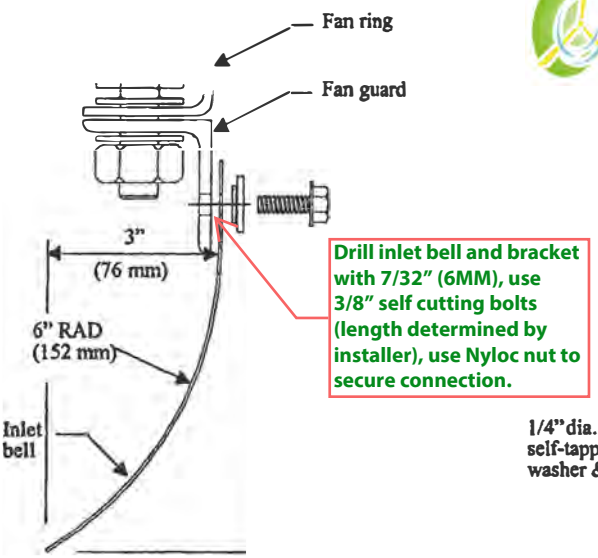
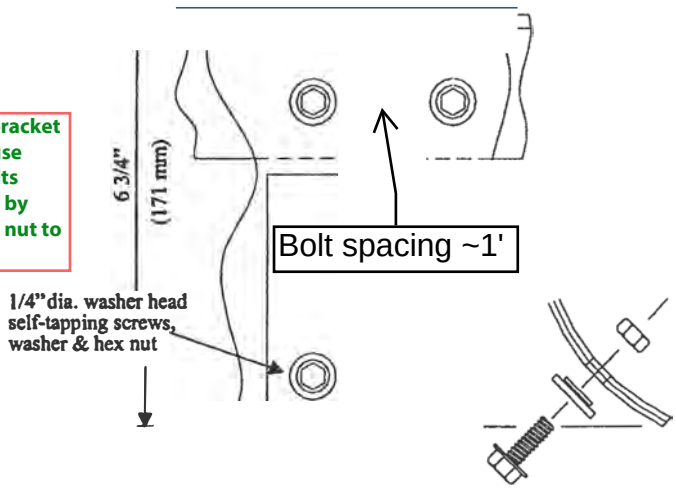
This manual applies to both Standard and Elliptical Inlet bells

INLET BELL INSTALLATION FOR FORCED DRAFT UNITS

The purpose of any Inlet bell is to reduce turning losses due to abrupt corners in the entry of the fan ring (called "Vena Contracta"). Inlet Bell also improve air distribution efficiency, lowering HP draw and lowering noise levels



TYPICAL SECTION THRU FAN RING, FAN GUARD & INLET BELL



TYPICAL INLET BELL SPLICE

Hardware supplied with every kit from VibeFX, which is a bolt, rubber washer and Nyloc nuts.

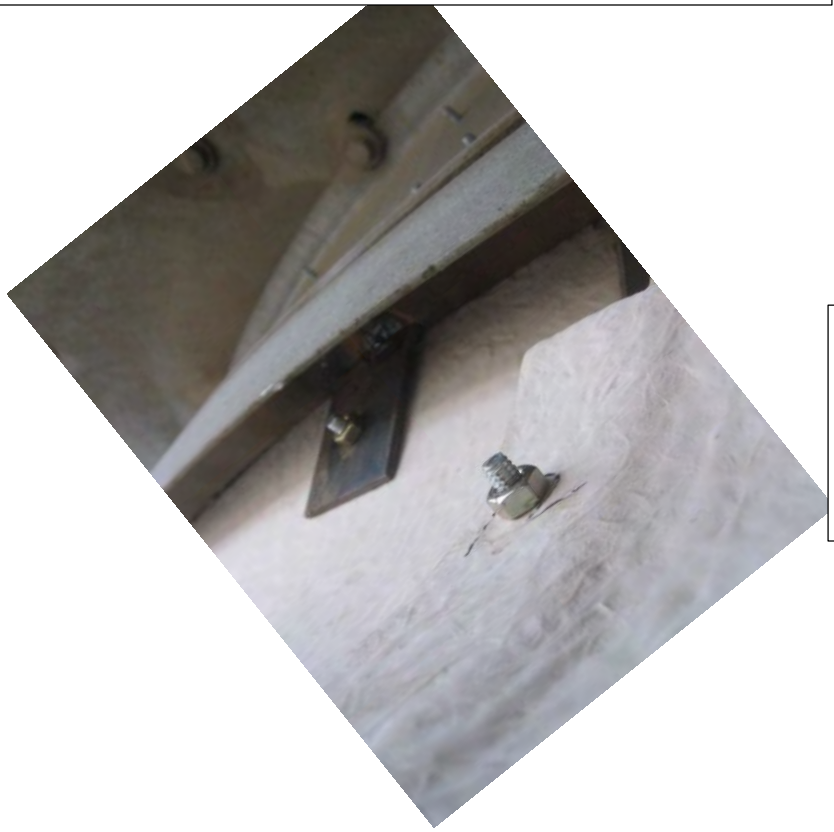
INSTALLATION

1. Mark off a line around the circumference about 1 ¼" (32 mm) from the bottom toe of the fan guard angle. This will indicate the location of the upper edge of the inlet bell.
2. Align the edge of a section with the line drawn. Using a 7/32" (6 mm) drill, drill a hole approximately 3/4" (19 mm) from the upper edge of inlet bell and about 1" (25 mm) from the end of an inlet bell section.
3. Install a 1/4" washer head self-tapping screw and washer to secure the inlet bell section to an existing fan guard hole.
4. Continue drilling holes in the inlet bell to match holes in fan guards. Continue installing screws. The last screw should be about 1" (25 mm) from the opposite end of the section. This last hole may need to be drilled through both the inlet bell and the fan guard.
5. Install the next section in the same manner. The mating ends should be butted together with no gap between them.
6. In addition to the screws installed in the fan guards, drill one hole in the lap joint of the curved section of the bell through the two mating sections. Install a ¼" washer head self-tapping screw, washer and hex nut to secure the two sections together. (See "TYPICAL INLET BELL SPLICE" above).
7. Inlet bells will require notching or special trimming around fan guards & structure during installation. This can easily be done using a common hacksaw.

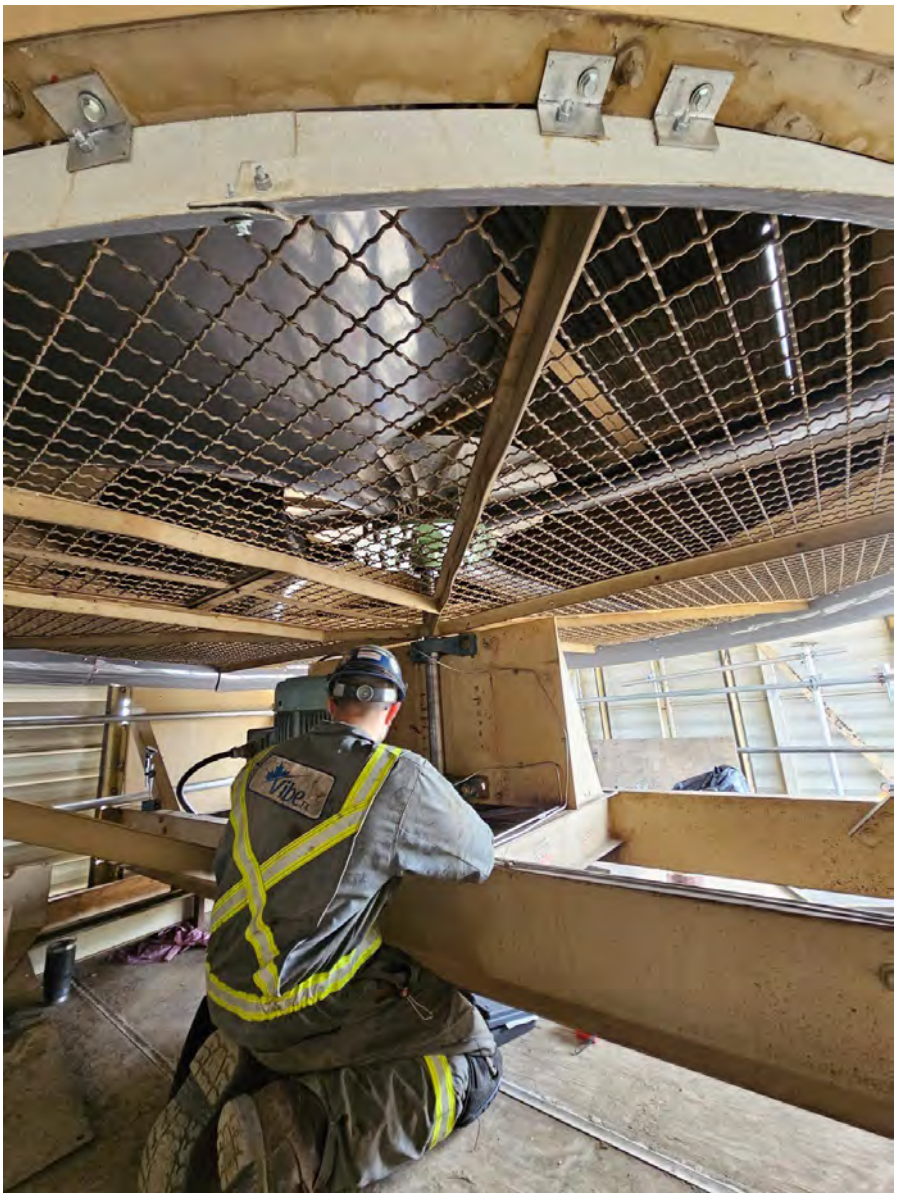
If you have any questions during installation call Nick Agius at 1-780-719-7413 or email nickagius2014@gmail.com or nick.agius@shaw.ca

Innovative ideas to hang Inlet bells for various applications.

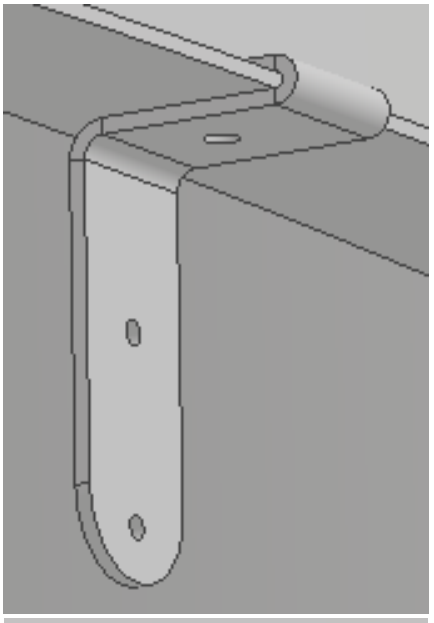
Welding small tabs is a very effective way to hang Inlet bells



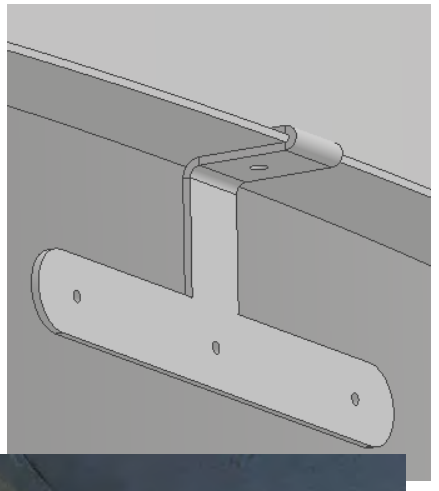
A diamond hack saw is the best way to cut the fiberglass. Use something with a fine blade but don't select a wood blade. Use a Jig-saw or an air tool like this enclosed picture



Bracket for E-bells™



This page shows idea for installers to make your own mounting brackets based off each situation you face. These mounting brackets are not supplied with the kits. Often the bottom fan guard needs to be lower or modified to install E-Bells™ in older coolers that were not designed for larger Inlet bells.

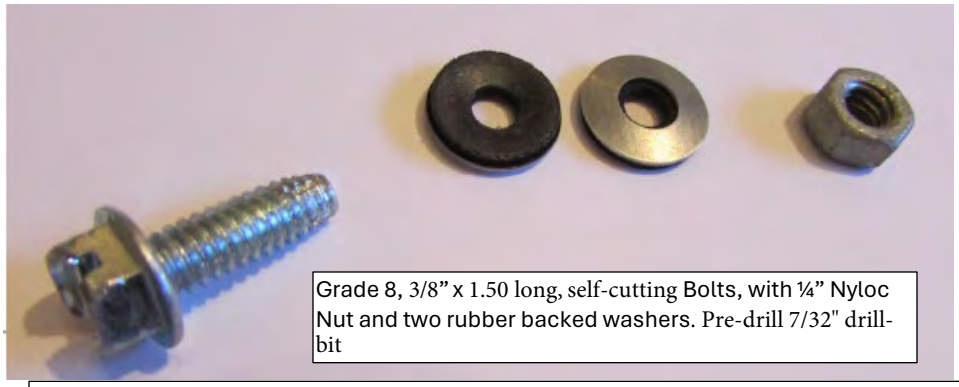


This clever idea will avoid long cuts. Start the first E-Bell™ section near one of the four crossbeams. So, the first cut will not need a patch.

For the other three crossbeams you need a cut under the beam. So, use metal patches like shown on this picture. These can be riveted or bolted onto the E-Bell.

Clamp each section as shown.

Elliptical Inlet Bell section



Grade 8, 3/8" x 1.50 long, self-cutting Bolts, with ¼" Nyloc Nut and two rubber backed washers. Pre-drill 7/32" drill-bit

Part No.	Thickness	Sections QTY Per kit
9ft E-inlet bell	6mm	5
10ft E-inlet bell	6mm	5
11ft E-inlet bell	6mm	6
12ft E-inlet bell	6mm	6
13ft E-inlet bell	6mm	7
14ft E-inlet bell	6mm	7
15ft E-inlet bell	6mm	7
16ft E-inlet bell	6mm	8

Installer drill holes for bolt as needed, where needed. The chart below is a suggestion only to be sure you have enough hardware on job site

Diameter	Sections	# of sets at each section	Bolts qty for all sections	Bolts qty at top to fan ring every 12"	**Total nuts/bolts/washers per kit**
8 ft or smaller	4	3	12	25	**37**
9-10ft	5	4	20	30	**50**
11-12ft	6	4	24	37	**61**
13-14-15ft	7	5	35	47	**82**
16ft	8	6	48	50	**98**

E-Bell™

13' E-Bell™ installation